AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A method ~~Method~~ for echo cancelling in a communication line system, the method comprising: ~~characterised in that said method is performed by~~

measuring the transmission return loss gain in said hybrid; and

adapting tunable passive elements of a hybrid ~~(5)~~ which forms part of the analog front end of said communications line system, whereby the values of the tunable passive elements are controlled by digital control means ~~(4)~~ to reduce the transmission return loss gain.

2. (*Currently Amended*) The method ~~Method~~ according to claim 1, wherein ~~characterised in that~~ a scaling factor ~~(k)~~ is used for adapting said tunable passive elements.

3. (*Currently Amended*) The method ~~Method~~ according to claim 1, wherein ~~characterised in that adapting said tunable passive elements comprises a step of measuring the TX return loss gain in said hybrid (5), whereby, when this~~ when the transmission return loss gain differs from zero, the digital control means ~~(4)~~ goes through a loop of adaptation of the tunable passive elements until a ~~this~~ zero value of said transmission ~~TX~~ return loss gain is obtained.

4.(*Currently Amended*) The method ~~Method~~ according to claim 3, wherein ~~characterised in that~~ a scaling factor (k) is used for adapting said tunable passive elements, and ~~further characterised in that~~ said hybrid ~~(5)~~ comprises a hybrid bridge ~~(13)~~ with two branches ~~(19)~~, each comprising two tunable passive impedances ~~(Z_2 and Z_b)~~ in series, one ~~of which~~ being a tunable balance impedance ~~(Z_b)~~, said tunable passive impedances being tuned such that the value of said tunable balance impedance ~~(Z_b)~~ approximates as close as possible the scaled impedance value of the parallel circuit of the line termination resistance ~~($2R_t/2n^2$)~~ in transmission paths of the hybrid bridge ~~the TX paths~~, and the line impedance ~~(Z_{tr+li})~~.

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5. (*Currently Amended*) The method ~~Method~~ according to claim 4, wherein ~~characterised in that~~ said hybrid ~~(5)~~ comprises a current to voltage converter ~~(14)~~, the feedback impedances ~~(Z_{fb})~~ of which being adapted so as to be equal to said tunable balance impedance ~~(Z_b)~~.

6. (*Currently Amended*) A device ~~Device~~ for echo cancelling in a communication line system, comprising ~~characterised in that it comprises~~:

[[-]] a hybrid ~~(5), being part of the analog front end of said communication line system, said hybrid (5)~~ comprising tunable passive elements; and ~~, the values of which are controllable, by a~~

[[-]] digital control means ~~(4)~~ coupled to said hybrid, said digital control means controlling the values of said tunable passive elements to reduce a transmission return loss gain in said hybrid ~~(5) and also included in said device~~.

7. (*Currently Amended*) The device ~~Device~~ according to claim 6, wherein ~~characterised in that~~ said tunable passive elements of said hybrid ~~(5)~~ are scalable by a predetermined scaling factor ~~(k)~~.

8. (*Currently Amended*) The device ~~Device~~ according to claim 6, wherein ~~characterised in that~~ said hybrid ~~(5)~~ comprises ~~a hybrid bridge (13) and~~ a current to voltage converter ~~(14)~~.

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9. (*Currently Amended*) The device ~~Device~~ according to claim 8, ~~characterised in that~~ said hybrid bridge comprising ~~(13) comprises~~ two ~~identical~~ branches ~~(19)~~, each comprising a tunable balance impedance ~~(Z_b)~~ in series with a second tunable impedance ~~(Z_2)~~.

10. (*Currently Amended*) The device ~~Device~~ according to claim 9, wherein ~~characterised in that~~ said tunable balance impedance ~~(Z_b)~~ comprises a first tunable resistor ~~(R_0)~~, in parallel with a series connection of a second tunable resistor ~~(R_1)~~ and a tunable capacitor ~~(C_1)~~, and in parallel with a fixed value ~~another~~ resistor ~~(R_3)~~.

11. (*Currently Amended*) The device ~~Device~~ according to claim 10, wherein ~~characterised in that~~ said fixed value ~~another~~ resistor ~~(R_3)~~ has the same resistance value ~~($2kR_t/2n^2$)~~, as the line termination resistors ~~(12)~~ in the transmission paths of the hybrid bridge ~~TX paths~~, scaled with a ~~said~~ scaling factor ~~(k)~~.

12. (*Currently Amended*) The device ~~Device~~ according to claim 9, wherein ~~characterised in that~~ said second tunable impedance ~~(Z_2)~~ in each branch ~~(19)~~ comprises a resistor ~~(R_2)~~ in series with a tunable capacitor ~~(C_2)~~, the value ~~($2kR_t/2n^2$)~~ of said resistor ~~(R_2)~~ being the same as the resistance value of said line termination resistors ~~(12)~~ in the transmission paths of the hybrid bridge ~~TX paths~~, scaled with a ~~said~~ scaling factor ~~(k)~~.

13. (*Currently Amended*) The device ~~Device~~ according to claim 8 ~~9~~, wherein ~~characterised in that~~ said current to voltage converter ~~(14)~~ comprises an operational amplifier ~~(20)~~ with tunable feedback impedances ~~(Z_{fb})~~ having the same impedance values as said tunable balance impedance ~~(Z_b)~~.

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14. (*Currently Amended*) The device ~~Device~~ according to claim 6, wherein ~~characterised in that~~ said digital control means comprises a microprocessor ~~(4)~~.

15. (*Currently Amended*) The device ~~Device~~ according to claim 9 ~~6~~, wherein ~~characterised in that~~ said tunable passive elements are part of an integrated circuit.